Schedule 2: Civil Works, Installations, Testing & Commissioning and Other Services			
	Name of STP : Anjanapura-2 under BDA Layout		
Item	**Description**	**Quantity**	**Total Price (including GST) INR**
2.1	**Civil and Building Works**		
	TSPS Works		
2.1.1	Inlet manhole & chamber, Screen channels, Effluent chamber, Overflow chamber, Wetwell with superstructure, Pump House, Valve & Flowmeter chambers, Thrust block and Anchor blocks, Epoxy painting etc.	LS	
	Inlet Works		
2.1.2	Inlet Chamber, Fine Screen Channel, Screen Effluent/ Grit Basin Distribution Channel, chambers,RCC Stair case etc.	LS	
2.1.3	Vortex Grit Basins & chamber, Grit Basin effluent channel, Grit Classifier arrangement,chambers,RCC Stair case etc.	LS	
2.1.4	Parshall Flume, drop chamber, connecting arrangement from Inlet works to Aeration basin,RCC Stair case etc.	LS	
	SBR BASINS		
2.1.5	SBR Basin flow distribution channel, SBR Basin Effluent Channel, RAS Feed, SAS inlet arrangement, Valve & flowmeter chamber, Overflow & Bypass chamber, scum collection and pumping system, RCC Stair case etc.	LS	
	BLOWER BUILDING		
2.1.6	Process Air Blower Building, Valve chamber, Supports for air piping,RCC Stair case etc.	LS	
2.1.7	Not Used	LS	
2.1.8	Not Used	LS	
	Chlorine Contact Tank		
2.1.9	Chlorine Contact Tank, Inlet chamber, distribution chamber, Effluent Channel/pipe, flowmeter chamber,RCC Stair case, Outfall Structure etc	LS	
2.1.10	Chlorine and Alum building etc and any other chemicals required as per the Process design, etc.	LS	
2.1.11	Plant water & Treated water storage sump / Pump Station and inlet flow arrangement, chamber etc.	LS	
	Disc Filter		
2.1.12	Disc Filter Influent chamber, Disc Filter units and Disc Filter Effluent channel, Backwash water collection arrangement etc.	LS	
	SLUDGE DEWATERING		
2.1.13	Sludge Dewatering Building including sludge storage, chambers etc.	LS	
2.1.14	Dewatering Feed sump and Pumping Station, chambers etc.	LS	
2.1.15	Scum Pit,Sump and Pump Station, Chamber etc.	LS	
2.1.16	Plant Drain Sump and Pump Station, Chamber etc.	LS	
	SUBSTATION FOR STP		
2.1.17	Switch gear room, Electrical Sub station	LS	
2.1.18	Transformer yard	LS	
	UTILITY BUILDINGS		
2.1.19	Plant D.G. Room	LS	
2.1.20	Administration Cum Laboratory Building & SCADA building (Two Floors) (For SCADA control room ,refer Particular ICA requirements)	LS	
2.1.21	Guard Room (Security Room)	LS	
	OTHER UTILITIES		
2.1.22	Roads & drains / Internal roads and landscaping	LS	
2.1.23	Approach Road to STP, TSPS	LS	
2.1.24	Parking Shed	LS	
2.1.25	Compound Wall with gates	LS	
2.1.26	Ground Improvement Plan, Site grading and Piling arrangement	LS	
2.1.27	Nalla & flow diversion etc.	LS	
2.1.28	Gabion wall, Site retaining structure and pile foundation	LS	
2.1.29	Additional Backfill for entire Project including approach road (if required)	LS	
2.1.30	Tree Plantation	LS	
	The bidder shall list here details of any additional items (all area of the works) required for a complete installation		
2.1.31		LS	
2.1.32		LS	

Schedule 2: Civil Works, Installations, Testing & Commissioning and Other Services			
	Name of STP : Anjanapura-2 under BDA Layout		
Item	**Description**	**Quantity**	**Total Price (including GST) INR**
2.1.33		LS	
Sub Total of 2.1			**0.00**
2.2	**Mechanical, Electrical Works and Instrumentation & Control Works**		
	Complete Installation, testing and commissioning of Mechanical system as per the Bid specifications		
	TSPS		
2.2.1	Inlet & Effluent chambers, Overflow chamber,Screen channels with necessary screening arrangements (Trash & Coarse screen), , Conveyors, Screening collection arrangement,Sluice gates, weir gates and Inlet & Overflow piping with fittings and Hardware with piping and all allied works complete	LS	
2.2.2	Wet well with superstructure & Pumping system with Submersible pumps with suitable valves and piping arrangements and Hardware and all allied works complete	LS	
2.2.3	Material handling system with suitable Cranes and hoist arrangements with Hardware and all allied works complete	LS	
2.2.4	Miscellaneous works such as flushing arrangements,dewatering and ventilation system including Hardware all allied works complete	LS	
2.2.5	**The bidder shall list here details of any additional items (all area of the works) required for a complete installation**		
2.2.5.1		LS	
	STP		
2.2.6	Inlet chamber and Fine Screen Channel, Overflow chamber, Screen Effluent/ Grit Basin Distribution Channel with Sluice gates, weir gates,Stop logs, and Inlet & Overflow piping with fittings, flushing arrangement, including Hardware all allied works complete	LS	
2.2.7	Screen chamber with effluent channel, Drain piping and Fine screening, Conveyors, Screening collection arrangement, flushing arrangement, inculding Hardware all allied works complete	LS	
2.2.8	Vortex Grit mechanism with grit classifier & washing mechanism,Conveyors, Grit collection arrangement, sluice gates,Stop logs, flushing arrangement, including Hardware all allied works complete	LS	
2.2.9	SBR Basin with Aeration arrangement with piping, Sluice gates and weir gates, scum collection and pumping system, Stop logs, flushing arrangement, EOT including Hardware all allied works complete	LS	
2.2.10	Not Used	LS	
2.2.11	Not Used	LS	
2.2.12	Not Used	LS	
2.2.13	Aeration Zone with RAS & SAS Pumpsets, Retrievable type Fine Bubble Diffuser Aeration system arrangement, Pipe grid, Drop legs,piping arrangements,Drain pumpsets, EOT arrangements, sluice gates, flushing arrangement,Handling Equipment,piping and valves including Hardware all allied works complete	LS	
2.2.14	Process Air Blower Building with blowers, Air Coolers,EOT Crane, Service water & blower cooling arrangement, Piping and valves, Handling Equipment,Ventilation system, Hardware and all allied works complete	LS	
2.2.15	Alum solution Preparation and dosing which includes minimum of preparation and dosing pumpsets, agitators, mixing arrangement, flushing arrangement,Channel mounted mixer for alum mixing, material Handling Equipment,Ventilation system, Hardware with piping and all allied works complete	LS	
2.2.16	Not Used	LS	
2.2.17	Not Used	LS	
2.2.18	Inlet & Outlet piping,Disc Filter Influent & Effluent chamber sluice gates,Weir gates, Stoplogs,Disc Filter units with Chemical Cleaning Arrangement, Backwash water system and collection arrangement etc.	LS	
2.2.19	Material pumping station general arrangement,Pumpsets, flushing arrangement, Handling Equipment,,Ventilation system,Hardware with piping, Valves and all allied works complete	LS	
2.2.20	Chlorine & any chemical dosing arrangement, flushing arrangement, spill containment bund, Handling Equipment,Ventilation system,Hardware with piping and all allied works complete	LS	
2.2.21	Inlet & Outlet piping,Chlorine Contact Tank & Outfall structure with sluice gates,weir gates,Stop log Gates, mixing arrangement, hardware with piping, valves and all allied works complete	LS	

Schedule 2: Civil Works, Installations, Testing & Commissioning and Other Services			
	Name of STP : Anjanapura-2 under BDA Layout		
Item	**Description**	**Quantity**	**Total Price (including GST) INR**
2.2.22	Dewatering feed pumping system- Submersible mixer arrangement, Sludge feed Pumpsets, flushing arrangement,Ventilation system,Handling Equipment and Hardware with piping, valves and all allied works complete	LS	
2.2.23	Polyelectrolyte dosing systems for sludge thicking units-Stirrer arrangement, feeding arrangement, Preparation & Storage tanks ,Dosing Pumpsets,flushing arrangement,Handling Equipment,Ventilation system, Hardware with piping and all allied works complete	LS	
2.2.24	Dewatering units, sludge cake conveying system with cut gate arrangement and hopper & Collection system, Handling Equipment for Sludge handling systems, flushing arrangement,Ventilation system, Hardware with piping and all allied works complete	LS	
2.2.25	Inlet & Outlet piping,Plant Drain Sump and Pump Station,Submersible pumpsets,Handling Equipment,Hardware with piping, Valves and all allied works complete	LS	
2.2.26	Inlet & Outlet piping, Treated water storage Pump Station,Submersible pumpsets,Handling Equipment,Hardware with piping, Valves and all allied works complete	LS	
2.2.27	Inlet & Outlet piping,Plant water Pump Station,Submersible pumpsets,Handling Equipment, Sluice gates, Weir gates, Stop logs,Hardware with piping, Valves and all allied works complete	LS	
2.2.28	Flushing arrangement for all chemical & Sludge handling system, Dewatering Pumps including piping and all allied works in all sludge & Chemical handling pump houses complete	LS	
2.2.29	Service water system including pumps with Hardware,piping,Valves and all allied works complete	LS	
2.2.30	Fire Fighting system for the entire STP (inclusive of fire alarm,fire detection,fire extinguishing system and integration with plan SCADA system for monitoring), Tools Kit, Air conditioning system for SCADA control room & Administration and Laboratory Building and all allied works complete.	LS	
2.2.31	Carrying out the SOTE test in presence of Client/ client representative Engineer at original manufacturer site for selected diffuser membranes from supplied lot with test results, and calculation sheet, photo and provide all of test results with necessary document including its data and photo and the its test results	LS	
2.2.32	**The bidder shall list here details of any additional items (all areas of the works) required for a complete installation**		
2.2.33		LS	
2.2.34		LS	
2.2.35		LS	
Sub Total of 2.2			**0.00**
2.3	**Electrical Systems for TSPS & STP**		
	Complete Installation, testing and commissioning of Electrical system as per the Bid specifications		
2.3.1	**Installation, testing and commissioning of 11kV underground Cables, Termination Kits at following locations as per scope, specification and drawings.**		
2.3.1.1	11kV Outdoor cable termination at Tariff Metering Unit / BESCOM	LS	
2.3.1.2	11kV Indoor cable terminations at incomer and outgoings of 11kV Metal Enclosed Switchboard of Sewage Treatment Plant	LS	
2.3.1.3	11kV Outdoor cable terminations at primary side of 11kV / 0.433 kV Transformers of Sewage Treatment Plant	LS	
2.3.1.4	11kV XLPE Cable from Metering Unit to incomer of 11kV Metal Enclosed Switchboard of Sewage Treatment Plant	LS	
2.3.1.5	11kV XLPE Cables from 11kV Metal Enclosed Switchboard to Primary cable end boxes of 11kV/0.433kV Transformers of Sewage Treatment Plant	LS	
2.3.1.6	11kV XLPE Cable from existing Metering Unit to Proposed 11kV Metal Enclosed Switchboard if applicable	LS	
2.3.1.7	11kV XLPE Cable from Proposed 11kV Metal Enclosed Switchboard to 11kV Metal Enclosed Switchboard at Existing Sewage Treatment Plant if applicable	LS	
2.3.1.8	11kV Cable Straight through joints	LS	
2.3.2	**Complete Installation, testing and commissioning of Electrical equipments at Sewage Treatment Plant Substation Building & Process Air Blower Building as per scope, specification and drawings.**		
2.3.2.1	11kV Metal Enclosed Switchboard with VCBs	LS	
2.3.2.2	Diesel Generator Set complete with AMF Control Panel	LS	

Schedule 2: Civil Works, Installations, Testing & Commissioning and Other Services			
	Name of STP : Anjanapura-2 under BDA Layout		
Item	**Description**	**Quantity**	**Total Price (including GST) INR**
2.3.2.3	11kV / 0.433kV Transformers with OLTC	LS	
2.3.2.4	LT Non Segregated Aluminium Bus ducts with necessary supporting structure	LS	
2.3.2.5	415V Switchgear PCC	LS	
2.3.2.6	415V Capacitor banks with Automatic Power Factor Correction Relay	LS	
2.3.2.7	110V D.C Battery Bank, Battery Charger with D.C Distribution Board	LS	
2.3.3	**Complete Installation, testing and commissioning of Motor Control Centres, Distribution boards etc at TSPS & Sewage Treatment plant with following major equipment, items as per scope, specification and drawings.**		
2.3.3.1	TSPS MCC	LS	
2.3.3.2	Process Air Blower MCC	LS	
2.3.3.3	Headworks MCC	LS	
2.3.3.4	Centrifuge MCC	LS	
2.3.3.5	RAS MCC	LS	
2.3.3.6	Chlorine MCC	LS	
2.3.3.7	Main Lighting DB	LS	
2.3.3.8	Variable Frequency Drives MCC	LS	
2.3.3.9	Local Push Button Stations	LS	
2.3.3.10	Miscellaneous works-Distribution Board	LS	
2.3.4	**Complete Installation, testing and commissioning of Lighting System at TSPS & Sewage Treatment Plant with following major equipment, items as per scope, specification and drawings.**		
2.3.4.1	Lighting Fixtures	LS	
2.3.4.2	Lighting panels	LS	
2.3.4.3	Switchboards, Receptacles, Power Plug & Sockets, Switches, Ceiling fans with regulators etc	LS	
2.3.4.4	Point wiring with conduits, wires, supports etc for Lighting fixtures, Receptacles, Ceiling fans etc	LS	
2.3.4.5	Street Lighting and Area Lighting poles with Junction boxes and Over hang	LS	
2.3.5	**Complete Installation, testing and commissioning of L.T Cabling System, HT/LT Cable Carrier System at TSPS & Sewage Treatment Plant with following major components as per scope, specification and drawings.**		
2.3.5.1	L.T cables	LS	
2.3.5.2	L.T Cable termination with glands and lugs	LS	
2.3.5.3	Cable trays on supports for both LT and HT Cables	LS	
2.3.5.4	Hume Pipe	LS	
2.3.6	**Installation, testing and commissioning of Earthing & Lighting Protection System at TSPS & Sewage Treatment Plant with following major components as per scope, specification and drawings.**		
2.3.6.1	Earthing Conductor for outdoor main grid	LS	
2.3.6.2	Earthing Conductor for indoor main grid	LS	
2.3.6.3	Earthing Conductors for outdoor equipments and Junction Boxes	LS	
2.3.6.4	Lightning Protection system with Arrestors and Down Conductors	LS	
2.3.6.5	Earthing Conductor for indoor equipments	LS	
2.3.6.6	Treated Earth pits	LS	
2.3.7	**Complete Installation, testing and commissioning of safety procedures with Signage for Electrical Equipments at TSPS & Sewage Treatment Plant as per scope, specification and drawings.**		
2.3.8	**The bidder shall list here details of any additional items required for a complete installation**		
2.3.8.1		LS	
2.3.8.2		LS	
2.3.8.3		LS	
Sub Total of 2.3			**0.00**
2.4	**Instrumentation, Control & Automation Systems**		
a	Complete Installation, testing and commissioning of Instrumentation system as per Equipment listed in Price Schedule 3A&3B and all other required Equipments as per Tender specifications	LS	
b	Complete Installation, testing and commissioning of control and Automation system as per Equipment listed in Price Schedule 3A&3B and all other required Equipments as per Tender specifications	LS	
	Testing Requirements of all ICA system		

Schedule 2: Civil Works, Installations, Testing & Commissioning and Other Services			
	Name of STP : Anjanapura-2 under BDA Layout		
Item	**Description**	**Quantity**	**Total Price (including GST) INR**
c	Factory acceptance tests(FAT) for all instrumentation,control and automation system, as required under specifications	LS	
d	Site acceptance tests(SAT)- for all instrumentation,control and automation system in combination and co-ordination with process,mechanical(individual vendor supplied systems) and electrical system's SAT test's ,inclusive of interoperability tests,Integration with ISPS,CP-24 and MIS-2 SCADA as required under specifications	LS	
e	The Bidder shall list here details of any additional items (all areas of the Works) required for complete installation	LS	
2.4.1	**The Bidder shall list here details of any additional items required for a complete installation**		
2.4.1.1		LS	
2.4.1.2		LS	
2.4.1.3		LS	
2.4.1.4		LS	
2.4.1.5		LS	
Sub Total of 2.4			**0.00**
2.5	**General Mechanical Systems**		
2.5.1	Building Services including domestic water systems The bidder shall list here details of any additional items required for a complete installation	LS	
2.5.2		LS	
Sub Total of 2.5			**0.00**
2.6	**Integrated Testing and Commissioning of the Entire System - TSPS, STP**	LS	
Sub Total of 2.6			**0.00**
Total of Schedule 2 (Sub Total 2.1+Sub Total 2.2+Sub Total 2.3+Sub Total 2.4+Sub Total 2.5+Sub Total 2.6) Carried to Schedule 7 - Grand Summary			**0.00**

Note:All quantities in lumpsum

Signature of Bidder
Name & Designation
Company